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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/380,546

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WALLACH

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WALLACH=23

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WASHINGTON DC 20004

HM12/0419

EXAMINER

WHITEMAN, B

ART UNIT

PAPER NUMBER

1633

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04/19/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/380,546

Applicant(s)

WALLACH ET AL.

Examiner

Brian Whiteman

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claims 1-43 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

DETAILED ACTION

Applicant should amend the disclosure in its entirety by properly labeling each sequence with correct SEQ ID NO. Should applicant amend the claims, so that the claims no longer resemble the original claims, another restriction may be necessary.

Claims 1-43 are pending and under consideration in the instant application.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claim 1, drawn to DNA sequences encoding at least one isoform of a G1 protein capable of binding to or interacting directly or indirectly with MORT-1, classified in class 536, subclass 23.1.
- II. Claim 1, drawn to DNA sequences encoding at least one isoform of a G1 protein capable of binding to or interacting directly or indirectly to MORT-1-binding proteins, classified in class 536, subclass 23.1.
- III. Claim 1, drawn to DNA sequences encoding at least one isoform of a G1 protein capable of binding to or interacting directly or indirectly to other intracellular mediator/modulator proteins, classified in class 536, subclass 23.1.

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- IV. Claim 1, drawn to DNA sequences encoding at least one isoform of a G1 protein of being capable of mediating the intracellular effect mediated by the FAS-R, classified in class 536, subclass 23.1.
- V. Claim 1, drawn to DNA sequences encoding at least one isoform of a G1 protein capable of mediating the intracellular effect mediated by p55-TNF-R, classified in class 536, subclass 23.1.
- VI. Claim 1, drawn to DNA sequences encoding at least one isoform of a G1 protein capable of mediating the intracellular effect mediated by other cytotoxic mediators, classified in class 536, subclass 23.1.
- VII. Claim 1, drawn to DNA sequences encoding at least one isoform of a G1 protein capable of mediating the intracellular effect mediated by inducers, classified in class 536, subclass 23.1.
- VIII. Claim 11, drawn to an isoform of a G1 protein encoded by a DNA sequence according to claim 1 being capable of binding to or interacting directly or indirectly with MORT-1, classified in class 530, subclass 350+.
- IX. Claim 11, drawn to an isoform of a G1 protein encoded by a DNA sequence according to claim 1 being capable of binding to or interacting directly or indirectly to MORT-1-binding proteins, classified in class 530, subclass 350+.
- X. Claim 11, drawn to an isoform of a G1 protein encoded by a DNA sequence according to claim 1 being capable of binding to or interacting directly or indirectly to other intracellular mediator/modulator proteins, classified in class 530, subclass 350+.

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- XI. Claim 11, drawn to an isoform of a G1 protein encoded by a DNA sequence being capable of mediating the intracellular effect mediated by the FAS-R, classified in class 530, subclass 350+.
- XII. Claim 11, drawn to an isoform of a G1 protein encoded by a DNA sequence according to claim 1 being capable of mediating the intracellular effect mediated by p55-TNF-R, classified in class 530, subclass 350+.
- XIII. Claim 11, drawn to an isoform of a G1 protein encoded by a DNA sequence according to claim 1 being capable of mediating the intracellular effect mediated by other cytotoxic mediators, classified in class 530, subclass 350+.
- XIV. Claim 11, drawn to an isoform of a G1 protein encoded by a DNA sequence according to claim 1 being capable of mediating the intracellular effect mediated by inducers, classified in class 530, subclass 350+.
- XV. Claim 15, drawn to antibodies specific for the G1 protein according to claim 11, classified in class 530, subclass 387.9.
- XVI. Claims 16 and 28, drawn to a method for the modulation of cell death, comprising treating said cells with one or more proteins according to claim 11, wherein said treating of said cells comprises introducing into said cells one or more proteins in a form suitable for intracellular introduction, classified in class 424, subclass 185.1.

Furthermore, the method of Group XVI is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XVI.

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XVII. Claims 16 and 28, drawn to a method for the modulation of inflammatory processes, comprising treating said cells with one or more proteins according to claim 11, wherein said treating of said cells comprises introducing into said cells one or more proteins in a form suitable for intracellular introduction, classified in class 424, subclass 185.1.

Furthermore, the method of Group XVII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XVII.

XVIII. Claims 16 and 28 drawn to a method for the modulation of cell death comprising treating said cells with one or more proteins according to claim 11, wherein said cells a nucleotide sequence encoding said one or more proteins in the form of a suitable vector capable of effecting the insertion of said sequence into said cells in a way that said sequence is expressed in said cells, classified in class 514, subclass 44, class 435, subclass 320.1.

Furthermore, the method of Group XVIII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XVIII.

XIX. Claims 16 and 28 drawn to a method for the modulation of cell death comprising treating said cells with one or more proteins according to claim 11, wherein said cells a nucleotide sequence encoding said one or more proteins in the form of a suitable vector capable of effecting the insertion of said sequence into said cells in a way that said sequence is expressed in said cells, classified in class 514, subclass 44, class 435, subclass 320.1.

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Furthermore, the method of Group XIX is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XIX.

- XX. Claim 17, drawn to a method for the modulation of the FAS-R ligand on cells carrying a FAS-R, comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding directly or indirectly to MORT-1, which MORT-1 binds to the intracellular domain of FAS-R, and thereby being capable of modulating/mediating the activity of said FAS-R, wherein said treating of said cells comprises introducing in said cells said one or more proteins in a from suitable for intracellular introduction, classified in class 424, subclass 185.1.

Furthermore, the method of Group XX is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XX.

- XXI. Claim 17, drawn to a method for the modulation of the FAS-R ligand on cells carrying a p55-R, comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding directly or indirectly to MORT-1, which MORT-1 binds to the intracellular domain of FAS-R, and thereby being capable of modulating/mediating the activity of said FAS-R, wherein said treating of said cells comprises introducing in said cells said one or more proteins in a from suitable for intracellular introduction, classified in class 424, subclass 185.1.

Furthermore, the method of Group XXI is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single

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disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XXI.

XXII. Claim 17, drawn to a method for the modulation of the FAS-R ligand on cells carrying a p55-R, comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding directly or indirectly to MORT-1 which binds TRADD which binds to the intracellular domain of p55-R and thereby being capable of modulating/mediating the activity of said FAS-R, wherein said treating of said cells comprises introducing in said cells said one or more proteins in a from suitable for intracellular introduction, classified in class 424, subclass 185.1.

Furthermore, the method of Group XXII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XXII.

XXIII. Claim 17, drawn to a method for the modulation of the FAS-R ligand on cells carrying a p55-R, comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding directly or indirectly to MORT-1 which binds TRADD which binds to the intracellular domain of p55-R and thereby being capable of modulating/mediating the activity of said p55 TNF-R, wherein said treating of said cells comprises introducing in said cells said one or more proteins in a from suitable for intracellular introduction, classified in class 424, subclass 185.1.

Furthermore, the method of Group XXIII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XXIII.

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XXIV. Claim 17, drawn to a method for the modulation of the FAS-R ligand on cells carrying a FAS-R, comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding directly or indirectly to MORT-1 which binds TRADD which binds to the intracellular domain of p55-R and thereby being capable of modulating/mediating the activity of said FAS-R, wherein said treating of said cells comprises introducing in said cells said one or more proteins in a from suitable for intracellular introduction, classified in class 424, subclass 185.1.

Furthermore, the method of Group XXIV is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XXIV.

XXV. Claim 17, drawn to a method for the modulation of the FAS-R ligand on cells carrying a FAS-R, comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding directly or indirectly to MORT-1 which binds TRADD which binds to the intracellular domain of p55-R and thereby being capable of modulating/mediating the activity of said p55 TNF-R, wherein said treating of said cells comprises introducing in said cells said one or more proteins in a from suitable for intracellular introduction, classified in class 424, subclass 185.1.

Furthermore, the method of Group XXV is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XXV.

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XXVI. Claim 17, drawn to a method for the modulation of the TNF effect on cells carrying a FAS-R, comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding directly or indirectly to MORT-1, which MORT-1 binds to the intracellular domain of FAS-R, and thereby being capable of modulating/mediating the activity of said FAS-R, wherein said treating of said cells comprises introducing in said cells said one or more proteins in a from suitable for intracellular introduction, classified in class 424, subclass 185.1.

Furthermore, the method of Group XXVI is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XXVI.

XXVII. Claim 17, drawn to a method for the modulation of the TNF effect on cells carrying a p55-R, comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding directly or indirectly to MORT-1, which MORT-1 binds to the intracellular domain of FAS-R, and thereby being capable of modulating/mediating the activity of said FAS-R, wherein said treating of said cells comprises introducing in said cells said one or more proteins in a from suitable for intracellular introduction, classified in class 424, subclass 185.1.

Furthermore, the method of Group XXVII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XXVII.

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XXVIII. Claim 17, drawn to a method for the modulation of the TNF effect on cells carrying a p55-R, comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding directly or indirectly to MORT-1 which binds TRADD which binds to the intracellular domain of p55-R and thereby being capable of modulating/mediating the activity of said FAS-R, wherein said treating of said cells comprises introducing in said cells said one or more proteins in a from suitable for intracellular introduction, classified in class 424, subclass 185.1.

Furthermore, the method of Group XXVIII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XXVIII.

XXIX. Claim 17, drawn to a method for the modulation of the TNF effect on cells carrying a p55-R, comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding directly or indirectly to MORT-1 which binds TRADD which binds to the intracellular domain of p55-R and thereby being capable of modulating/mediating the activity of said FAS-R, wherein said treating of said cells comprises introducing in said cells said one or more proteins in a from suitable for intracellular introduction, classified in class 424, subclass 185.1.

Furthermore, the method of Group XXIX is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XXIX.

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XXX. Claim 17, drawn to a method for the modulation of the TNF effect on cells carrying a FAS-R, comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding directly or indirectly to MORT-1 which binds TRADD which binds to the intracellular domain of p55-R and thereby being capable of modulating/mediating the activity of said p55 TNF-R, wherein said treating of said cells comprises introducing in said cells said one or more proteins in a form suitable for intracellular introduction, classified in class 424, subclass 185.1.

Furthermore, the method of Group XXX is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XXX.

XXXI. Claim 17, drawn to a method for the modulation of the TNF effect on cells carrying a FAS-R, comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding directly or indirectly to MORT-1 which binds TRADD which binds to the intracellular domain of p55-R and thereby being capable of modulating/mediating the activity of said p55 TNF-R, wherein said treating of said cells comprises introducing in said cells said one or more proteins in a form suitable for intracellular introduction, classified in class 424, subclass 185.1.

Furthermore, the method of Group XXXI is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XXXI.

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XXXII. Claim 17, drawn to a method for the modulation of the FAS-R ligand on cells carrying a p55-R, comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding directly or indirectly to MORT-1 which binds TRADD which binds to the intracellular domain of p55-R and thereby being capable of modulating/mediating the activity of said FAS-R, wherein said treating of said cells comprises introducing in said cells said one or more proteins in a from suitable for intracellular introduction, classified in class 424, subclass 185.1.

Furthermore, the method of Group XXXII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XXXII.

XXXIII. Claim 17, drawn to a method for the modulation of the FAS-R ligand on cells carrying a p55-R, comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding directly or indirectly to MORT-1 which binds TRADD which binds to the intracellular domain of p55-R and thereby being capable of modulating/mediating the activity of said p55 TNF-R, wherein said treating of said cells comprises introducing in said cells said one or more proteins in a from suitable for intracellular introduction, classified in class 424, subclass 185.1.

Furthermore, the method of Group XXXIII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XXXIII.

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XXXIV. Claim 17, drawn to a method for the modulation of the FAS-R ligand on cells carrying a FAS-R, comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding indirectly to MORT-1, which binds TRADD which binds to the intracellular domain of p55-R and thereby being capable of modulating/mediating the activity of said p55 TNF-R, wherein said treating of said cells comprises introducing in said cells said one or more proteins in a form suitable for intracellular introduction, classified in class 424, subclass 185.1.

Furthermore, the method of Group XXXIV is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XXXIV.

XXXV. Claim 17 and 30, drawn to a method for the modulation of the TNF effect on cells carrying a p55-R, comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding directly or indirectly to MORT-1 which binds TRADD which binds to the intracellular domain of p55-R and thereby being capable of modulating/mediating the activity of said FAS-R, wherein said treating of said cells comprises introducing in said cells said one or more proteins in a form suitable for intracellular introduction, a pharmaceutical composition for the modulation of the TNF-effect on cells comprising, as active ingredient, a recombinant animal virus vector encoding a protein capable of binding a cell surface receptor and encoding at least one isoform of a G1 protein, according to claim 11, classified in class 424, subclass 185.1.

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Furthermore, the method of Group XXXV is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XXXV.

XXXVI. Claim 17 and 30, drawn to a method for the modulation of the TNF effect on cells carrying a p55-R, comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding directly or indirectly to MORT-1 which binds TRADD which binds to the intracellular domain of p55-R and thereby being capable of modulating/mediating the activity of said p55 TNF-R, wherein said treating of said cells comprises introducing in said cells said one or more proteins in a form suitable for intracellular introduction, a pharmaceutical composition for the modulation of the TNF-effect on cells comprising, as active ingredient, a recombinant animal virus vector encoding a protein capable of binding a cell surface receptor and encoding at least one isoform of a G1 protein, according to claim 11 classified in class 424, subclass 185.1.

Furthermore, the method of Group XXXVI is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XXXVI.

XXXVII. Claim 17 and 30, drawn to a method for the modulation of the TNF effect on cells carrying a FAS-R, comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding directly or indirectly to MORT-1 which binds TRADD which binds to the intracellular domain of p55-R and thereby being capable of modulating/mediating the activity of said FAS-R, wherein said treating of said cells comprises introducing in said cells said one or more proteins

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in a from suitable for intracellular introduction, a pharmaceutical composition for the modulation of the TNF-effect on cells comprising, as active ingredient, a recombinant animal virus vector encoding a protein capable of binding a cell surface receptor and encoding at least one isoform of a G1 protein, according to claim 11 classified in class 424, subclass 185.1.

Furthermore, the method of Group XXXVII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XXXVII.

XXXVIII. Claim 17 and 30, drawn to a method for the modulation of the TNF effect on cells carrying a FAS-R, comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding directly or indirectly to MORT-1 which binds TRADD which binds to the intracellular domain of p55-R and thereby being capable of modulating/mediating the activity of said p55 TNF-R, wherein said treating of said cells comprises introducing in said cells said one or more proteins in a from suitable for intracellular introduction, a pharmaceutical composition for the modulation of the TNF-effect on cells comprising, as active ingredient, a recombinant animal virus vector encoding a protein capable of binding a cell surface receptor and encoding at least one isoform of a G1 protein, according to claim 11 classified in class 424, subclass 185.1.

Furthermore, the method of Group XXXVIII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XXXVIII.

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XXXIX. Claims 18 and 29, drawn to a method for the modulation of the FAS-R ligand on cells according to claim 17, wherein said treating cells comprises introducing into said cells said G1 protein, a pharmaceutical composition for the modulation of the FAS-R ligand-effect on cells comprising, as active, ingredient at least one isoform of a G1 protein according to claim 11, classified in class, subclass, class 530, subclass 350, class 424, subclass 185.1.

Furthermore, the method of Group XXXIX is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XXXIX.

XXXX. Claims 18 and 29 drawn to a method for the modulation of TNF effect on cells according to claim 17, wherein said treating cells comprises introducing into said cells said G1 protein, a pharmaceutical composition for the modulation of the TNF- effect on cells comprising, as active, ingredient at least one isoform of a G1 protein according to claim 11, classified in class 530, subclass 350, class 424, subclass 185.1.

Furthermore, the method of Group XXXX is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XXXX.

XXXXI. Claim 18, drawn to a method for the modulation of the TNF effect on cells according to claim 17, wherein said treating cells comprises introducing into said cells, a DNA sequence encoding said G1 protein in the form of a suitable vector carrying said sequence said vector capable of effecting the insertion of said

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sequence into said cells in a way that said sequence is expressed in said cells, classified in class 514, subclass 44, class 435, subclass 320.1.

Furthermore, the method of Group XXXXI is further directed to a multiple number of distinct inventions in Groups I-VII, LXIV, LXVIII-LXXI applicant must elect a single disclosed invention from Groups I-VII- LXIV, LXVIII-LXXI exhibiting an activity listed in Group XXXXI.

XXXXII. Claim 18, drawn to a method for the modulation of the FAS-R ligand on cells according to claim 17, wherein said treating cells comprises introducing into said cells, a DNA sequence encoding said G1 protein in the form of a suitable vector carrying said sequence said vector capable of effecting the insertion of said sequence into said cells in a way that said sequence is expressed in said cells, classified in class 514, subclass 44, class 435, subclass 320.1.

Furthermore, the method of Group XXXXII is further directed to a multiple number of distinct inventions in Groups I-VII, LXIV, LXVIII-LXXI applicant must elect a single disclosed invention from Groups I-VII- LXIV, LXVIII-LXXI exhibiting an activity listed in Group XXXXII.

XXXXIII. Claims 19 and 30, drawn to a method according to claim 17 wherein said treating cells is by transfection of said cells with a recombinant animal virus vector comprising the steps of: (a) constructing a recombinant animal vector carrying a sequence encoding a viral surface protein (ligand) that is capable of binding to a specific cell surface receptor on the surface of a FAS-R carrying cell and a second sequence encoding a protein selected from an isoform of G1 proteins to any one of claims 11-13, that when expressed in said cells is capable of modulating/mediating the activity of said FAS-R; and (b) infecting said cells with

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said vector of (a), a pharmaceutical composition for the modulation of the FAS-R ligand- effect on cells comprising, as active ingredient, a recombinant animal virus vector encoding a protein capable of binding a cell surface receptor and encoding at least one isoform of a G1 protein, according to claim 11, classified in class 435, subclass 320.1, class 530, subclass 350, class 514, subclass 44.

Furthermore, the method of Group XXXXIII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII applicant must elect a single disclosed invention from Groups VIII- XIV, LXI-LXII exhibiting an activity listed in Groups XXXXIII.

XXXXIV. Claim 19, drawn to a method according to claim 17 wherein said treating cells is by transfection of said cells with a recombinant animal virus vector comprising the steps of: (a) constructing a recombinant animal vector carrying a sequence encoding a viral surface protein (ligand) that is capable of binding to a specific cell surface receptor on the surface of a p55-R-carrying cell and a second sequence encoding a protein selected from an isoform of G1 proteins according to any one of claims 11-13, that when expressed in said cells is capable of modulating/mediating the activity of said p55R; and (b) infecting said cells with said vector of (a), classified in class 514, subclass 44 class 435, subclass 320.1.

Furthermore, the method of Group XXXXIV is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group XXXXIV.

XXXXV. Claim 20, drawn to a method for the modulation of cell death, comprising treating said cells with one or more inhibitors of one or more proteins/enzymes mediating said cell death, said inhibitors being selected from the group consisting of (I) one

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or more G1 proteins according to claim 11 capable of inhibiting said cell death:
and (II) inhibitors of one or more G1 proteins of claim 11 when said one or more
G 1 proteins augments/enhances or mediates said cell death, classified in class
536, subclass 24.5.

Furthermore, the method of Group XXXXV is further directed to a multiple
number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must
elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an
activity listed in Group XXXXV.

XXXXVI. Claim 20, drawn to a method for the modulation of inflammatory processes,
comprising treating said cells with one or more inhibitors of one or more
proteins/enzymes mediating said inflammatory processes, said inhibitors being
selected from the group consisting of (I) one or more G1 proteins according to
claim 11 capable of inhibiting said inflammatory processes: and (II) inhibitors of
one or more G1 proteins of claim 11 when said one or more G 1 proteins
augments/enhances or mediates said inflammatory process, classified in class 536,
subclass 24.5.

Furthermore, the method of Group XXXXVI is further directed to a multiple
number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must
elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an
activity listed in Group XXXXVI.

XXXXVII. Claim 21, drawn to a method for modulating the FAS-R ligand on cells carrying a
FAS-R comprising treating said cells with antibodies, according to claim 15, said
treating being by application of a suitable composition containing said antibodies
to said cells, wherein when the G1 protein or portions of said cells are exposed on
the extracellular surface, said composition is formulated for extracellular

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application, and when said G1 proteins are intracellular said composition is formulated for intracellular application, classified in class 424, subclass 130.1.

XXXXVIII. Claim 21, drawn to a method for modulating the TNF effect on cells carrying a FAS-R comprising treating said cells with antibodies, according to claim 15, said treating being by application of a suitable composition containing said antibodies to said cells, wherein when the G1 protein or portions of said cells are exposed on the extracellular surface, said composition is formulated for extracellular application, and when said G1 proteins are intracellular said composition is formulated for intracellular application, classified class 435, subclass 320.1, class 530, subclass 350, class 424, subclass 130.1.

IL. Claim 22, drawn to a method for modulating the FAS-R ligand on cells carrying a FAS-R comprising treating said cells with an oligonucleotide sequence encoding an antisense sequence for at least part of the DNA sequence encoding a G1 protein according to claim 1, said oligonucleotide sequence being capable of blocking the expression of the G1 protein, classified in class 536, subclass 24.5.

Furthermore, the method of Group IL is further directed to a multiple number of distinct inventions in Groups I-VII, LXIV, LXVIII-LXXI applicant must elect a single disclosed invention from Groups I-VII- LXIV, LXVIII-LXXI exhibiting an activity listed in Group IL.

L. Claim 22, drawn to a method for modulating the TNF-effect on cells carrying a FAS-R comprising treating said cells with an oligonucleotide sequence encoding an antisense sequence for at least part of the DNA sequence encoding a G1 protein according to claim 1, said oligonucleotide sequence being capable of blocking the expression of the G1 protein, classified in class 536, subclass 24.5.

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Furthermore, the method of Group L is further directed to a multiple number of distinct inventions in Groups I-VII, LXIV, LXVIII-LXXI applicant must elect a single disclosed invention from Groups I-VII- LXIV, LXVIII-LXXI exhibiting an activity listed in Group L.

- LI. Claims 22 and 31, drawn to a method for modulating the TNF-effect on cells carrying a p55 TNF-R comprising treating said cells with an oligonucleotide sequence encoding an antisense sequence for at least part of the DNA sequence encoding a G1 protein according to claim 1, said oligonucleotide sequence being capable of blocking the expression of the G1 protein, a pharmaceutical composition for the modulation of the TNF-effect on cells comprising, as active ingredient, an oligonucleotide sequence encoding an anti-sense sequence of the G1 protein mRNA sequence according to claim 1, classified in class, subclass, class 536, subclass 24.5.

Furthermore, the method of Group LI is further directed to a multiple number of distinct inventions in Groups I-VII, LXIV, LXVIII-LXXI applicant must elect a single disclosed invention from Groups I-VII- LXIV, LXVIII-LXXI exhibiting an activity listed in Group LI.

- LII. Claims 22 and 31, drawn to a method for modulating the FAS-R ligand on cells carrying a p55 TNF-R comprising treating said cells with an oligonucleotide sequence encoding an antisense sequence for at least part of the DNA sequence encoding a G1 protein according to claim 1, said oligonucleotide sequence being capable of blocking the expression of the G1 protein, a pharmaceutical composition for the modulation of the FAS-R ligand comprising, as active ingredient, an oligonucleotide sequence encoding an anti-sense sequence of the

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G1 protein mRNA sequence according to claim 1, classified in class 536, subclass 24.5.

Furthermore, the method of Group LII is further directed to a multiple number of distinct inventions in Groups I-VII, LXIV, LXVIII-LXXI applicant must elect a single disclosed invention from Groups I-VII- LXIV, LXVIII-LXXI exhibiting an activity listed in Group LII.

- LIII. Claim 23, drawn to a method according to claim 22 wherein said oligonucleotide sequence is introduced to said cells via a virus of claim 19 wherein said second sequence of said virus encodes said oligonucleotide sequence, classified in class 424 subclass 93.1, class 514, subclass 44, class 536, subclass 24.5.

Furthermore, the method of Group LIII is further directed to a multiple number of distinct inventions in Groups I-VII, LXIV, LXVIII-LXXI applicant must elect a single disclosed invention from Groups I-VII- LXIV, LXVIII-LXXI exhibiting an activity listed in Group LIII.

- LIV. Claim 24, drawn to a method for treating tumor cells, comprising, (a) constructing a recombinant animal virus vector carrying a sequence encoding a viral surface protein capable of binding to a specific tumor cell surface receptor and a sequence encoding a protein selected from the G1 protein of claim 11, that when expressed in said tumor cells is capable of killing said cell; and (b) infecting said tumor cells with said vector of (a), classified in class 514, subclass 44, class 435 subclass 320.1.

Furthermore, the method of Group LIV is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LIV.

- LV. Claim 25, drawn to a method for modulating the FAS-R ligand on cells comprising applying the ribozyme procedure in which a vector encoding a

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ribozyme sequence capable of interacting with a cellular mRNA sequence encoding a G1 protein according to claim 11, is introduced into said cells in a form that permits expression of said ribozyme sequence in said cells, and wherein when said ribozyme sequence is expressed in said cells it interacts with said cellular mRNA sequence and cleaves said mRNA sequence resulting in the inhibition of expression of said G1 protein in said cells, classified in class 536, subclass 24.5, class 435, subclass 320.1, class 514, subclass 44.

Furthermore, the method of Group LV is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LV.

LVI. Claim 25, drawn to a method for modulating the TNF effect on cells comprising applying the ribozyme procedure in which a vector encoding a ribozyme sequence capable of interacting with a cellular mRNA sequence encoding a G1 protein according to claim 11, is introduced into said cells in a form that permits expression of said ribozyme sequence in said cells, and wherein when said ribozyme sequence is expressed in said cells it interacts with said cellular mRNA sequence and cleaves said mRNA sequence resulting in the inhibition of expression of said G1 protein in said cells, classified in class 536, subclass 24.5, class 435, subclass 320.1, class 514, subclass 44.

Furthermore, the method of Group LVI is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LIV.

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LVII. Claim 26, drawn to a method, wherein said G1 protein is capable of binding directly or indirectly to MORT-1, which in turn, binds specifically to FAS-IC, classified in class 530, subclass 350.

Furthermore, the method of Group LVII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LVII.

LVIII. Claim 26, drawn to a method selected from the method according to claim 16, wherein said G1 protein is capable of binding directly or indirectly to any MORT-1-binding protein, which are capable of binding directly or indirectly to MORT-1, in turn, binds specifically to FAS-IC, classified in class 530, subclass 350.

Furthermore, the method of Group LVIII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LVIII.

LIX. Claim 26, drawn to a method selected from the method according to claim 16, wherein said G1 protein is capable of binding directly or indirectly to MORT-1 binding proteins, which are capable of binding directly to MORT-1-binding proteins, which, MORT-1, in turn, bind to TRADD, which in turn bind to the p55-IC, classified in class 530, subclass 350.

Furthermore, the method of Group LIX is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LIX

LX. Claim 27, drawn to a method for isolating and identifying proteins, according to claim 11, capable of binding directly or indirectly to the MORT-1 protein,

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comprising applying the yeast two-hybrid procedure, classified in class 530, subclass 344.

Furthermore, the method of Group LX is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LX.

LXI. Claim 13, drawn to a G1 isoform, according to claim 11, wherein said protein has at least part of the amino acid sequence in Fig. 2, classified in class 530; subclass 350+.

LXII. Claim 12, drawn to a G1 isoform, according to claim 11, wherein said protein has at least part of the amino acid sequence in Fig. 1, classified in class 530, subclass 350+.

LXIII. Claim 14, drawn to a method for producing at least one isoform of the G1 protein according to any one of the claims 11-13, comprising growing the transformed host cells according to claim 10 suitable under conditions for the expression of said proteins, effecting post-translational modification as necessary for obtaining of said protein and isolating said expressed protein, classified in class 435, subclass 70.1+.

Furthermore, the method of Group LXIII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXIII.

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LXIV. Claim 6, drawn to a DNA sequence according to claim 4 encoding a G1 isoform having the amino acid sequence depicted in Fig. 2, classified in class 536, subclass 23.1.

LXV. Claims 7-10, drawn to a vector comprising DNA sequence in claim 1, a vector capable of being expressed in a eukaryotic host cell or prokaryotic host cell, transformed eukaryotic or prokaryotic host cell containing a vector, classified in class 435, subclass 252.3, subclass 320.1+.

Furthermore, the method of Group LXV is further directed to a multiple number of distinct inventions in Groups I-VII, LXIV, LXVIII-LXXI applicant must elect a single disclosed invention from Groups I-VII- LXIV, LXVIII-LXXI exhibiting an activity listed in Group LXV.

LXVI. Claim 24, drawn to a method for treating HIV-infected cells, comprising, (a) constructing a recombinant animal virus vector carrying a sequence encoding a viral surface protein capable of binding to a specific HIV-infected cell surface receptor and a sequence encoding a protein selected from the G1 protein of claim 11, that when expressed in said HIV-infected cells is capable of killing said cell; and (b) infecting said HIV-infected cells with said vector of (a), classified in class 514, subclass 44, class 435 subclass 320.1.

Furthermore, the method of Group LXVI is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXVI.

LXVII. Claim 24, drawn to a method for treating other diseases cells, comprising, (a) constructing a recombinant animal virus vector carrying a sequence encoding a viral surface protein capable of binding to a specific receptor carried by other

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diseased cells and a sequence encoding a protein selected from the G1 protein of claim 11, that when expressed in said other disease cells is capable of killing said cell; and (b) infecting said other diseased cells with said vector of (a), classified in class 514, subclass 44, class 435 subclass 320.1.

Furthermore, the method of Group LXVII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXVII.

LXVIII. Claim 2, drawn to a DNA sequence according to claim 1 selected from the group consisting of:

- (a) a cDNA sequence derived from the coding region of isoform of G1 protein;
- (b) DNA sequences capable of hybridization to a sequence of (a) under moderately stringent conditions and which encode a biologically active isoform of G1 protein; and
- (c) DNA sequence which are degenerate as a result of the genetic code to the DNA sequences defined in (a) and (b) and which encode a biologically active isoform of G1 protein, classified in class 536, subclass 23.1.

Furthermore, the method of Group LXVIII is further directed to a multiple number of distinct inventions in Groups I-VII, LXIV, LXVIII-LXXI applicant must elect a single disclosed invention from Groups I-VII, LXIV, LXVIII-LXXI exhibiting an activity listed in Group LXVIII.

LXIX. Claim 3, drawn to a DNA sequence according to claim 1 comprising at least part of the sequence depicted in Fig. 1 and encoding at least one isoform of the G1 protein, the G1 α isoform, classified in class 536, subclass 23.1.

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Furthermore, the method of Group LXIX is further directed to a multiple number of distinct inventions in Groups I-VII, LXIV, LXVIII-LXXI applicant must elect a single disclosed invention from Groups I-VII, LXIV, LXVIII-LXXI exhibiting an activity listed in Group LXIX.

- LXX. Claim 4, a DNA sequence according to claim 1 comprising at least part of the sequence depicted in Fig. 2 and encoding at least one isoform of the G1 protein, the G1 β isoform, classified in class 536, subclass 23.1.

Furthermore, the method of Group LXX is further directed to a multiple number of distinct inventions in Groups I-VII, LXIV, LXVIII-LXXI applicant must elect a single disclosed invention from Groups I-VII, LXIV, LXVIII-LXXI exhibiting an activity listed in Group LXX.

- LXXI. Claim 5, drawn to a DNA sequence according to claim 3 encoding a G1 isoform having the amino acid sequence depicted in Fig. 1, classified in class 536, subclass 23.1.

Furthermore, the method of Group LXXI is further directed to a multiple number of distinct inventions in Groups I-VII, LXIV, LXVIII-LXXI applicant must elect a single disclosed invention from Groups I-VII, LXIV, LXVIII-LXXI exhibiting an activity listed in Group LXXI.

- LXXII. Claim 42, drawn to a method for identifying and producing a molecule capable of directly or indirectly modulating the cellular activity modulated/mediated by a G1 protein, classified in class 530, subclass 333+, subclass 412+, class 435, subclass 6, subclass 91.1.

Furthermore, the method of Group LXXII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXII.

- LXXIII. Claims 32-34, drawn to a method for the modulation of the

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MORT-1-induced effect comprising treating said cells in accordance with a method of claim 16 with G1 proteins, said treatment resulting in the enhancement and thereby also of the FAS-R, classified in class 530, subclass 350, class 536, subclass 24.5.

Furthermore, the method of Group LXXIII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, applicant must elect a polypeptide exhibiting an activity listed in Group LXXIII.

LXXIV. Claims 32-34, drawn to a method for the modulation of the MORT-1-induced effect comprising treating said cells in accordance with a method of claim 16 with G1 proteins, said treatment resulting in inhibition of said MORT-1 and thereby also of the p55-R, classified in class 530, subclass 350, class 536, subclass 24.5.

Furthermore, the method of Group LXXIV is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXIV.

LXXV. Claims 32-34, drawn to a method for the modulation of the MORT-1-binding protein comprising treating said cells in accordance with a method of claim 16 with G1 proteins, said treatment resulting in the enhancement of said MORT-1 and thereby also of the FAS-R, classified in class 530, subclass 350, class 536, subclass 24.5.

Furthermore, the method of Group LXXV is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXV.

LXXVI. Claims 32-34, drawn to a method for the modulation of the

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MORT-1-binding protein comprising treating said cells in accordance with a method of claim 16 with G1 proteins, said treatment resulting in the inhibition of said MORT-1-binding protein and thereby also of the FAS-R, classified in class 530, subclass 350, class 536, subclass 24.5.

Furthermore, the method of Group LXXVI is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXVI.

LXXVII. Claims 32-34, drawn to a method for the modulation of the other protein induced effect on cells comprising treating said cells in accordance with a method of claim 16 with G1 proteins, said treatment resulting in the enhancement of other protein-mediated effect and thereby also of the p55-R, classified in class 530, subclass 350, class 536, subclass 24.5.

Furthermore, the method of Group LXXVII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXVII.

LXXVIII. Claims 32-34, drawn to a method for the modulation of the other protein induced effect on cells comprising treating said cells in accordance with a method of claim 16 with G1 proteins, said treatment resulting in the inhibition of said other protein-mediated effect and thereby also of the FAS-R, classified in class 530, subclass 350, class 536, subclass 24.5.

Furthermore, the method of Group LXXVIII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXVIII.

LXXIX. Claims 32-34, drawn to a method for the modulation of the

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other protein induced effect on cells comprising treating said cells in accordance with a method of claim 16 with G1 proteins, said treatment resulting in the enhancement of p55-R, classified in class 530, subclass 350, class 536, subclass 24.5.

Furthermore, the method of Group LXXIX is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXIX.

LXXX. Claims 32-34, drawn to a method for the modulation of the other protein induced effect on cells comprising treating said cells in accordance with a method of claim 16 with G1 proteins, said treatment resulting in the inhibition of other protein-mediated effect and thereby also of other cytotoxic mediator, classified in class 530, subclass 350, class 536, subclass 24.5.

Furthermore, the method of Group LXXX is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXX.

LXXXI. Claims 32-34, drawn to a method for the modulation of the other protein induced effect on cells comprising treating said cells in accordance with a method of claim 16 with G1 proteins, said treatment resulting in the enhancement of said other protein-mediated effect and thereby also of other inducer-mediated effect, classified in class 530, subclass 350, class 536, subclass 24.5.

Furthermore, the method of Group LXXXI is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must

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elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXXI.

LXXXII. Claims 32-34, drawn to a method for the modulation of the other protein induced effect on cells comprising treating said cells in accordance with a method of claim 16 with G1 proteins, said treatment resulting in the inhibition of said other protein-mediated effect and thereby also other inducer-mediated effect, classified in class 530, subclass 350, class 536, subclass 24.5.

Furthermore, the method of Group LXXXII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXXII.

LXXXIII. Claim 27, drawn to a method for isolating and identifying proteins, according to claim 11, capable of binding directly or indirectly to the any of the MORT-1 binding proteins, comprising applying the yeast two-hybrid procedure, classified in class 530, subclass 344.

Furthermore, the method of Group LXXXIII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXXIII.

LXXXIV. Claim 35, drawn to a method of modulating apoptotic processes or programmed cell death processes comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding directly or indirectly to MORT-1, which MORT-1 binds to the intracellular domain of FAS-R, wherein said treating of said cells comprises introducing into said cells one or more proteins in a form suitable for intracellular introduction classified in class 530, subclass 350.

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Furthermore, the method of Group LXXXIV is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXXIV.

LXXXV. Claim 35, drawn to a method of modulating apoptotic processes or programmed cell death processes comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding indirectly to MORT-1, which MORT-1 binds to the intracellular domain of FAS-R, wherein said treating of said cells comprises introducing into said cells one or more proteins in a form suitable for intracellular introduction classified in class 530, subclass 350.

Furthermore, the method of Group LXXXV is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXXV.

LXXXVI. Claim 35, drawn to a method of modulating apoptotic processes or programmed cell death processes comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding directly or indirectly to any of the MORT-1 binding proteins, which MORT-1 binds to the intracellular domain of FAS-R, wherein said treating of said cells comprises introducing into said cells one or more proteins in a form suitable for intracellular introduction classified in class 530, subclass 350.

Furthermore, the method of Group LXXXVI is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXXVI.

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LXXXVII. Claim 35, drawn to a method of modulating apoptotic processes or programmed cell death processes comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding directly or indirectly to MORT-1, which MORT-1 bind to TRADD which binds to the intracellular domain of p55-R and thereby being capable of modulating/mediating the activity of said FAS-R, wherein said treating of said cells comprises introducing into said cells one or more proteins in a form suitable for intracellular introduction, classified in class 530, subclass 350.

Furthermore, the method of Group LXXXVII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXXVII.

LXXXVIII. Claim 35, drawn to a method of modulating apoptotic processes or programmed cell death processes comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding directly or indirectly to any of the MORT-1 binding proteins, which MORT-1 bind to TRADD which binds to the intracellular domain of p55-R and thereby being capable of modulating/mediating the activity of said FAS-R, wherein said treating of said cells comprises introducing into said cells one or more proteins in a form suitable for intracellular introduction classified in class 530, subclass 350.

Furthermore, the method of Group LXXXVIII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXXVIII.

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LXXXIX. Claim 35, drawn to a method of modulating apoptotic processes or programmed cell death processes comprising treating said cells with one or more G1 proteins according to claim 11, capable of binding directly or indirectly to MORT-1, which MORT-1 bind to TRADD which binds to the intracellular domain of p55-R and thereby being capable of modulating/mediating the activity of said p55 TNF-R, wherein said treating of said cells comprises introducing into said cells one or more proteins in a form suitable for intracellular introduction, classified in class 530, subclass 350.

Furthermore, the method of Group LXXXIX is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXXIX.

LXXXX. Claim 35, drawn to drawn to a method of modulating apoptotic processes or programmed cell death comprising introducing said cells a DNA sequence encoding said one or more proteins in the form of a suitable vector carrying said sequence, said vector being capable of effecting the insertion of said sequence into said cells in way that said sequence is expressed in said cells, classified in class 514, subclass 44, class 435, subclass 320.1.

Furthermore, the method of Group LXXXX is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXXX.

LXXXXI. Claim 37, drawn to a method for screening of a ligand capable of binding to a protein according to claim 11, classified in class 530, subclass 333+.

Furthermore, the method of Group LXXXXI is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must

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elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXXXI.

- LXXXXII. Claim 38, drawn to a method for screening DNA sequence coding for a ligand capable of binding a protein according to claim 11 comprising applying the yeast two-hybrid procedure, classified in class 435, subclass 6.

Furthermore, the method of Group LXXXXII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXXXII.

- LXXXXIII. Claim 39, drawn to a method for producing and identifying a ligand capable of modulating the cellular activity modulated/mediated by MORT-1, classified in class 530, subclass 333+.

Furthermore, the method of Group LXXXXIII is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXXXIII.

- LXXXXIV. Claim 39, drawn to a method for producing and identifying a ligand capable of modulating the cellular activity modulated/mediated by MORT-1 binding protein, classified in class 530, subclass 333+.

Furthermore, the method of Group LXXXXIV is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXXXIV.

- LXXXXV. Claim 40, drawn to a method of identifying and producing a ligand capable of modulating or mediated by a protein according to claim 11 comprising (a) screening for a ligand capable of binding to a polypeptide comprising at least a

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portion of the G α sequences depicted in Fig. 1 or at least portion of the G1 β sequence depicted in Fig. 2, classified in class 530, subclass 333+.

Furthermore, the method of Group LXXXXV is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXXXV.

LXXXXVI. Claim 41, drawn to a method of producing and identifying a ligand capable of modulating the cellular activity modulated/mediated by G1 comprising: (a) screening for a ligand capable of binding to a polypeptide comprising at least a portion of the G α sequences depicted in Fig. 1 or at least portion of the G1 β sequence depicted in Fig. 2, classified in class 435, subclass 6.

Furthermore, the method of Group LXXXXVI is further directed to a multiple number of distinct inventions in Groups VIII-XIV, LXI-LXII, applicant must elect a single disclosed invention from Groups VIII-XIV, LXI-LXII exhibiting an activity listed in Group LXXXXVI.

Claim 1 links DNA sequences encoding at least one isoform of a G1 protein in inventions I-VII, LXIV, and LXVIII-LXXI. Claim 11 links isoforms of a G1 protein in inventions VIII-XIV, and LXI-LXII. The restriction requirement between linked inventions is subject to the non-allowance of the linking claim, 1 or 11. Upon the allowance of the linking claim, the restriction requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise include all the limitations of the allowable linking claim will be entitled to examination in the instant application. Applicant(s) are advised that if any such claim(s) depending from or including all the limitations of the allowable linking claim is presented in a continuation or divisional application may be subject to provisional statutory and/or non-statutory double patenting rejections over the claims of the instant application. Where a

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restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP 804.01.

The inventions are distinct, each from the other because of the following reasons:

Groups I-VII, LXIV, LXVIII-LXXI and Groups XXXXI-XXXXII, IL-L, LIII, LXV, are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the DNA sequences of Groups I-VII, LXIV, LXVIII-LXXI is not limited in each of the processes cited in Groups XXXXI-XXXXII, IL-L, LIII, LXV, Groups I-VII, LXIV, LXVIII-LXXI can also be used in an *in vitro* assay. In addition, the evidences of using the products of Groups I-VII, LXIV, LXVIII-LXXI in materially distinct processes are clearly illustrated in the claimed invention of Groups XXXXI and IL.

Groups VIII-XIV, LXI-LXII and Groups XVI-XXXX, XXXXIII-XXXXVII, LIV-LX, LXVI-LXVII, LXXII-LXXXXII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the isoforms of the G1 protein in Groups VIII-XIV, LXI-LXII are not limited in each of the processes cited in Groups XVI-XXXX, XXXXIII-XXXXVII, LIV-

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LX, LXVI-LXVII, and LXXII-LXXXXII. Groups VIII-XIV, LXI-LXII can also be used in an *in vitro* assay. In addition, the evidences of using the products of Groups VIII-XIV, LXI-LXII in materially distinct processes are clearly illustrated in the claimed invention of Groups XVII and LIV.

Group XV and Groups XXXXVII, XXXXVIII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the antibodies of Group XV is not limited in the process cited in Group XXXXVII and XXXXVIII, Group XV can also be used in an *in vitro* assay.

Groups I-VII, LXIV, LXVIII-LXXI and Groups VIII-XIV, LXI-LXII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the different inventions are distinct due to Group I-VII, LXIV, LXVIII-LXXI being DNA sequences encoding at least one isoform of a G1 protein and VIII-XIV, LXI-LXII, being an isoform of a G1 protein. Groups I-VII, LXIV, LXVIII-LXXI require different materials and the process for making the composition than in Group VIII-XIV, LXI-LXII.

Groups I-VII, LXIV, LXVIII-LXXI and Group XV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP §

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808.01). In the instant case, the different inventions are distinct due to Groups I-VII, LXIV, LXVIII-LXXI being DNA sequences encoding at least one isoform of a G1 protein and Group XV being antibodies specific for the G1 protein. Groups I-VII, LXIV, LXVIII-LXXI require different materials and the process for making the composition than in Group XV.

Groups VIII-XIV, LXI-LXII and Group XV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the different inventions are distinct due to Groups VIII-XIV, LXI-LXII being an isoform of a G1 protein and Group XV being antibodies specific for the G1 protein. Groups VIII-XIV, LXI-LXII require different materials and the process for making the composition than in Group XV.

Groups LXIII, LXXXXIII-LXXXXVI and Groups VIII-XIV, LXI-LXII, are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, Group VIII-XIV, LXI-LXII is drawn to an isoform of a G1 protein. Group LXXXXIII is directed to producing a ligand capable of modulating the cellular activity modulated/mediated by MORT-1. Group LXXXXV is directed to producing a ligand capable of modulating or mediated by a protein according to claim 11 comprising (a) screening for a ligand capable of binding to a polypeptide comprising at least a portion of the G α sequences depicted in Fig. 1 or at least portion of the G1 β sequence depicted in Fig. 2. Group LXXXXVI is directed to producing a ligand capable of modulating the cellular

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activity modulated/mediated by G1 comprising: (a) screening for a ligand capable of binding to a polypeptide comprising at least a portion of the G α sequences depicted in Fig. 1 or at least portion of the G1 β sequence. Thus, the polypeptide sequences of Group VIII-XIV, LXI-LXII can be made by other process of making, *e.g. placing an order to a biotechnology company to produce the protein sequence of interest*, and does not rely on the material(s) cited in the process of making in Groups LXIII and LXXXXIII-LXXXXVI.

Group I and Groups II-VII, LXIV, LI-LII, LXVIII-LXXI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are distinct due to Group I being a DNA sequence encoding at least one isoform of a G1 protein and Group II-VII, LXIV, LXVIII-LXXI being different DNA sequences encoding different isoforms of the G1 protein. Group I requires different materials and the process for making the composition than in Group II-VII, LXIV, LXVIII-LXXI. In addition, Groups LI-LII are directed to a pharmaceutical compositions, which require an effective amount of an oligonucleotide sequence encoding an anti-sense sequence of the G1 protein mRNA or encoding an antisense for at least part of the DNA sequence encoding a G1 protein for a therapeutic effect compared to Groups VIII-XIV, LXI-LXII that are directed to DNA sequences encoding at least one isoform of the G1 protein.

Group VIII and Groups IX-XIV, XXXV-XXXVII, XXXIX-XXXX, LXI-LXII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are distinct due to

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Group VIII being an isoform of a G1 protein and Groups IX-XIV, LXI-LXII being different isoforms of the G1 protein and Groups XXXV-XXXVII, XXXIX-XXXX being pharmaceutical compositions. Group VIII requires different materials and the process for making the composition than in Group IX-XIV, XXXV-XXXVII, XXXIX-XXXX, LXI-LXII. In addition, Groups XXXV-XXXVII, XXXIX-XXXX, are directed to a pharmaceutical composition that requires an effective amount of at least one G1 protein for a therapeutic effect compared to Groups VIII-XIV, LXI-LXII that are directed to isoforms of the G1 protein.

Although there are no provisions under the section for "Relationship of Inventions" in MPEP 806.05 for inventive groups that are directed to different methods, restriction is deemed to be proper because each of the methods of inventions XVI-LXI, LXIII, LXV-LXVII, LXXII-LXXXXII constitutes patentably distinct inventions for the following reasons: Each of the inventions is directed to different goals and comprises materially distinct steps, wherein each of the compositions in each invention is structurally distinct and/or generates distinct mechanisms and functional effects as indicated above. The scope of each of the cited inventions encompasses an employed method, which generates distinct function(s) and effect(s), and furthermore does not necessarily overlap with that of another invention. Furthermore, none of the method steps cited in inventions XVI-LXI, LXIII, LXV-LXVII, LXXII-LXXXXII recite a similar method of using DNA sequences in inventions I-VII, LXIV, LXVIII-LXXI; proteins in inventions VIII-XIV, LXI-LXII, or antibodies in Group XV. Each of the inventions XVI-LXI, LXIII, LXV-LXVII, LXXII-LXXXXII comprises materially distinct steps, and/or generates different functions and effects, and thus, is not required for use with one another.

Furthermore, if applicant elects an inventions encompassing any of the Groups I-VII, LXIV, and LXVIII-LXXI, which are generic to a plurality of disclosed patentably distinct DNA sequences comprising a DNA sequence encoding at least one isoform of a G1 protein. Applicant is required under 35 U.S.C. 121 to elect a single disclosed DNA sequence displaying activity listed in the elected Group, even though this requirement is traversed.

In addition, if applicant elects an invention encompassing any of the Groups VIII-XIV and LXI-LXII, which are generic to a plurality of disclosed patentably distinct protein sequences comprising an isoform of a G1 protein. Applicant is required under 35 U.S.C. 121 to elect a single disclosed protein sequence displaying activity listed in the elected Group, even though this requirement is traversed.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

It would be unduly burdensome for the examiner to search and consider patentability of all of the presently pending claims, a restriction for examination purposes as indicated s proper.

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Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 § 1.17(h).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ms. Tracey Johnson whose telephone number is (703) 305-2982.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Whiteman whose telephone number is (703) 305-0775. The examiner can normally be reached on M-F, (730-400 EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Clark can be reached at (703) 305-4051.

Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center number is (703) 305-7401.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

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Brian Whiteman

Patent Examiner

April 16, 2001

A handwritten signature in black ink, appearing to read "Dave T. Nguyen", with a long horizontal flourish extending to the right.

DAVE T. NGUYEN
PRIMARY EXAMINER